

PATENT ABSTRACTS OF JAPAN

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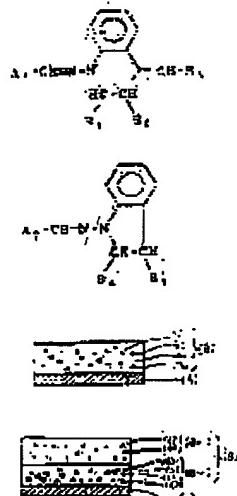
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 FUKAWATASE MIDORI
 KAWAHARA TATSURO
 AIZAWA MASAO

(54) ELECTROPHOTOGRAPHIC SENSITIVE BODY

(57) Abstract:

PURPOSE: To obtain an electrophotographic sensitive body high in sensitivity to semiconductor laser beams by incorporating a combination of at least one of 2 kinds of specified positive hole transfer material and at least one of a group of a specified electron transfer materials in a photosensitive layer formed by dispersing an X-type metal phthalocyanine compd. into a binder resin.

CONSTITUTION: The electrophotographic sensitive body is obtained by forming on a conductive substrate A the photosensitive layer B prepared by dispersing into the binder 4 made of a generally used synthetic resin, the X-type metal phthalocyanine 1, the electron transfer material, such as a disazo pigment or a cyanine dye deriv. 3, and the positive hole transfer material 2 represented by formula I, A₁ being optionally subst. aromatic hydrocarbon or such a hetero ring, and R₁, R₂, R₃ being each H, halogen, optionally subst. alkyl, aralkyl, or aryl, independent of each other, or the positive hole transfer layer B-1 contg. the materials 2, 4, and a charge generating layer B-2 contg. the materials 1, 3 may be formed to prepare a laminate type photosensitive layerphotosensitive layer B.



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XP-002303102

(C) WPI/Dowent

AN - 1986-261070 [40]

AP - JP19850028310 19850218; JP19850028310 19850218; [Based on J61188543]

CPY - DNIN

DC - E13 E14 E24 G08 P84 S06 T04

FS - CPI;GMPI;EPI

IC - G03G5/04 ; G03G5/06

MC - E06-D01 E06-D02 E21 E23-B E25 G06-F06

- S06-A01A1 T04-G04

M3 - [01] D010 D011 D013 D014 D015 D020 D022 D040 D602 D622 E100 F010 F020

G001 G002 G010 G011 G012 G013 G020 G021 G040 G100 G331 H103 H141 H181

H2 H201 H211 H341 H541 H600 H602 H603 H608 H609 H621 H622 H623 H641 K0

K6 K630 M113 M115 M119 M123 M125 M129 M132 M135 M139 M210 M211 M212

M213 M214 M215 M216 M220 M221 M222 M223 M224 M225 M226 M231 M232 M233

M240 M272 M273 M280 M281 M282 M283 M311 M312 M313 M314 M315 M316 M320

M321 M322 M323 M331 M332 M333 M342 M412 M511 M512 M520 M530 M531 M532

M533 M540 M782 M903 Q313 Q346 Q454 Q615 R043

M4 - [02] A300 A400 A429 A500 A600 A960 C710 D000 D020 E350 M280 M320 M411

M417 M511 M520 M530 M540 M630 M782 M903 Q344 Q346 Q454 R043 W002 W030

W326 W334; 07541

- [03] G010 G011 G012 G013 G015 G019 G020 G022 G023 G029 G113 G221 G299

H103 H142 H342 H4 H402 H442 H542 H602 H603 H608 H609 H642 H643 H8 J0

J012 J014 J132 J3 J332 K0 K5 K534 K599 K620 K630 K699 L143 L199 M1

M111 M121 M122 M129 M136 M139 M145 M149 M210 M211 M212 M240 M272 M273

M280 M282 M283 M320 M414 M510 M520 M533 M540 M782 M903 Q344 Q346 Q454

R043 W003 W030 W113 W122 W131 W334

- [04] C116 D013 D014 D019 D621 D622 E350 F012 F014 F016 F220 G010 G013

G016 G019 G020 G022 G029 G100 G331 H103 H141 H142 H181 H201 H212 H720

H724 J523 L721 L730 L930 L951 L999 M113 M119 M126 M134 M210 M211 M212

M240 M273 M282 M283 M313 M320 M321 M332 M343 M412 M413 M414 M510 M511

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W003 W004 W012 W030 W323 W334; 07309

PA - (DNIN) DAINIPPON INK & CHEM KK

PN - JP61188543 A 19860822 DW198640 013pp

- JP4077907B B 19921209 DW199301 G03G5/06 017pp

PR - JP19850028310 19850218

XA - C1986-112988

XIC - G03G-005/04 ; G03G-005/06

XP - N1986-195051

AB - J61188543 Electrophotographic photoreceptor has (A) photosensitive layer contg. (a) x-type metal phthalocyanine cpd. dispersed in binderr
(b) positive hole transport cpd. and (c) electron transport cpd.

- Cpd. (b) is a cpd. of general formula (I) or (II). In (I), A1 is (un)subst. aromatic hydrocarbon or aromatic heterocyclic; R1, R2 and R3 are each H, halogen or (un)subst. alkyl, aralkyl or aryl. In (II), A2 is (un)subst. aromatic hydrocarbon or aromatic heterocyclic; R4 and R5 are each H, halogen, (un)subst. alkyl, aralkyl or aryl.

- Cpd. (c) is disazo pigments, perylene pigments, anthanthrone pigments, thiapyrylium salt deriv., pyrylium salts deriv. or cyanine dye deriv.

- Photoreceptor comprises, e.g. a conductive base plate and a photosensitive layer in which (a), (b), (c) and an electron-acceptive cpd. are dispersed in binder. Charge generation cpd. is, e.g. benzoic acid, halonaphthoquinone or 2,6-dichlorobenzene. Content of (a) is 0.05-90 pref. 15-50 wt.% with respect to photosensitive layer. Content of (b) and (c) and an electron acceptive cpd. is 0.001-90, pref.

(C) WPI/Denavit

15-50, 0.1-90, pref. 10-30 and 0.001-90, pref. 0.1-10 wt.%, respectively, with respect to (a).

- USE/ADVANTAGE - Electrophotographic photoreceptor has sufficient sensitivity in long wavelength range of 780-900 nm and little residual electric potential. Photoreceptor is useful for laser beam printer and various optical recording devices using semiconductor laser, etc.

(13pp Dwg.No.0/0)

IW - ELECTROPHOTOGRAPHIC PHOTORECEIVER USEFUL LASER BEAM PRINT PHOTORECEIVER LAYER CONTAIN TYPE METAL PHTHALO CYANINE COMPOUND DISPERSE BIND POSITIVE

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NC - 001

OPD - 1985-02-18

ORD - 1986-08-22

PAW - (DNIN) DAI NIPPON INK & CHEM KK

RRL - 07541 07309

TI - Electrophotographic photoreceptor useful for laser beam printer - has photoreceptive layer contg. X-type metal phthalo:cyanine cpd. dispersed in binder and positive

XP-002303102

(C) WPI/Derwent

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